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EXAMINER

SWARTZ, JAMIE H

ART UNIT PAPER NUMBER

3694

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/027,777

Applicant(s)

MACLEAN ET AL.

Examiner

Jamie H. Swartz

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/26/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the writing on the current drawings is either difficult or impossible to read. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "58" has been used to designate both "acknowledge receipt" and "ack signal 56". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 4, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 2 recites the limitation "said BSC/RNC" in line 16. There is insufficient antecedent basis for this limitation in the claim.

6. Claims 4 and 16 recite the limitation "said PDP." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Schweitzer (US 20010051931 A1).

9. Referring to claim 1, Schweitzer discloses *a method of providing content-based billing to a prepaid subscriber* (§ 47). Schweitzer discloses *a initiating information exchange between a first Serving General Packet Radio Service Support Node (SGSN) and Server Control Point (SCP) regarding said prepaid subscriber* (§ 6, 40). Schweitzer discloses *providing volume limit threshold data to the first SGSN* (§ 40, 45, 46). Schweitzer discloses *forwarding said volume limit threshold data to a Gateway GPRS Support Node (GGSN)* (§ 45). Schweitzer discloses *accumulating a billable data count relating to a profile of a prepaid subscriber* (§ 45-47). Schweitzer discloses *transmitting said accumulated data count to said first SGSN if said accumulated data count reaches said volume limit threshold* (§ 42). Schweitzer discloses *providing said accumulated data count to said SCP* (§ 45-47).

Art Unit: 3694

10. Referring to claim 9, Schweitzer discloses *forwarding said volume limit threshold data is forwarded from said first SGSN*. (¶ 45).

11. Referring to claim 10, Schweitzer discloses *exchanging data between a Base Station Controller (BSC), said first SGSN, and said GGSN* (¶ 07).

12. Referring to claim 11, Schweitzer discloses accumulating a billable data count comprises accumulating said billable data count by said GGSN (¶ 45, 46).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2, 4, 8, 12, 13, 16, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schweitzer (US 20010051931 A1), as applied to claim 1 above, in view of Bjelland et al. (US 20020089949 A1).

15. Referring to claim 2, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated

Art Unit: 3694

data count to the SCP. Schweitzer does not show an interruption between BSC/RNC and SGSN before the volume limit threshold is reached. Bjelland, however, discloses *comprising transmitting said accumulated data count if an exchange of data between said BSC/RNC and SGSN is interrupted before said volume limit threshold is reached* (§ 42, 47). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of an interrupted transmission before the end of a threshold. A prepaid wireless device requires a signal to operate. If loss of signal occurs this results in an interruption in the phone call, at that point the threshold has not been reached.

16. Referring to claim 4, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show a SGSN with information to release or terminate communications with the PDP. Bjelland, however, discloses *providing said first SGSN with information to release or terminate communications with said PDP* (§ 11, 47). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system

Art Unit: 3694

having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of sending information to release or terminate communications with the PDP, as well as to include the details of the PDP. The PDP context is a data structure present on both the SGSN and the GGSN which contains the subscriber's session information when the subscriber has an active session. When a mobile wants to use GPRS, it must first attach and then activate a PDP context. Schweitzer includes details of both SGSN and GGSN regarding his invention. PDP context is the specific step that gets activated or deactivated when using SGSN and GGSN as Schweitzer does.

17. Referring to claim 8, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show providing a volume limit threshold provided from the SCP. Bjelland, however, discloses *providing volume limit threshold data is provided from the SCP* (¶ 11). SCP also referred to as BSS. Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have



Art Unit: 3694

been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of where the volume limit is provided from.

Schweitzer discusses a BSS (SCP) where data packets and information are routed.

Modifying the BSS (SCP) in Schweitzer's case would make the invention more efficient as it already linked together by a network.

18. Regarding claim 12, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show the release or terminate is provided from said SCP. Bjelland, however, discloses *information to release or terminate is provided from said SCP* (§ 23, 42, 47). SCP also referred to as BSS. Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of information terminating at the BSS (SCP). Schweitzer discusses the BSS (SCP) where data packets and information are routed. Since the BSS (SCP) is a base station and receives information from the use of the wireless system it would be obvious that the specific instruction to terminate would come from the BSS (SCP).

19. Regarding claim 13, Schweitzer teaches transmitted said accumulated data count from said GGSN to said first SGSN (§ 6). Schweitzer teaches providing said accumulated data count to said SCP (§ 45-47). Schweitzer teaches accumulating a billable data count at said GGSN according to said prepaid subscriber profile (§ 45-47). Schweitzer teaches providing said accumulated data count to said SCP (§ 45-47). Schweitzer does not however discuss the specifics of having a second SGSN, terminating communications between the SCP and the SGSN, establishing communications between the SGSN and the SCP, or transmitting accumulated data count from the GGSN. Bjelland, however, teaches contacting said first SGSN by a second SGSN indicating a mobility transfer (§ 27). Bjelland teaches terminating communications between said SCP and said first SGSN with respect to said prepaid subscriber (§ 27). Bjelland teaches establishing communications between said second SGSN and said SCP with respect to said prepaid subscriber (§ 27). Bjelland teaches transmitting said accumulated data count from said GGSN to said second SGSN (§ 27). Schweitzer teaches providing volume limit threshold data from a SCP to a SGSN (§ 40, 45, 46). Schweitzer does not however teach the specifics of the second SGSN. Bjelland, however, teaches from said SCP to said second SGSN (§ 27). Schweitzer teaches forwarding said volume limited threshold data from the SGSN to the GGSN (§ 45). Schweitzer does not however teach the specifics of the second SGSN. Bjelland, however, teaches from said second SGSN to said GGSN (§ 27). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network.

Art Unit: 3694

Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of a second SGSN. Wireless voice communication works off of towers to transmit the signal. The signal of an individual tower is not infinite, so it requires the use of multiple towers to be sure there aren't interruptions in use. All cellular communication requires the use of more than one SGSN.

20. Regarding claim 16, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show a second SGSN with information to release or terminate communications with the PDP. Bjelland, however, discloses *providing said second SGSN with information to release or terminate communications with said PDP* (§ 11, 47). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of sending information to release or terminate communications with the PDP, as well as to include

Art Unit: 3694

the details of the PDP. The PDP context is a data structure present on both the SGSN and the GGSN which contains the subscriber's session information when the subscriber has an active session. When a mobile wants to use GPRS, it must first attach and then activate a PDP context. Schweitzer includes details of both SGSN and GGSN regarding his invention. PDP context is the specific step that gets activated or deactivated when using SGSN and GGSN as Schweitzer does. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of a second SGSN. Wireless communication works off of towers to transmit the signal. The signal of an individual tower is not infinite, so it requires the use of multiple towers to be sure there aren't interruptions in use. All cellular communication requires the use of more than one SGSN.

21. Referring to claim 18, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show establishing a communication with the second SGSN before terminating communication with the first SGSN. Bjelland, however, discloses *communication between said second SGSN and said SCP is established prior to termination of communication between said first SGSN and SCP.* (¶ 27). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more

Art Unit: 3694

technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of where second SGSN is established prior to terminating the first SGSN because wireless voice communication works off of towers to transmit the signal. The signal of an individual tower is not infinite, so it requires the use of multiple towers to be sure there aren't interruptions in use. All cellular communication requires the use of more than one tower. It is vital when using wireless voice communication to have seamless communication. If the second SGSN is not established prior to the termination of the first SGSN an interruption in the conversation will occur, causing a brief silence or a force termination of the call. From a customer service aspect, force termination or interruptions are frowned upon.

22. Referring to claim 19, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does not show exchanging information between the first and second SGSN. Bjelland, however, discloses *the step of exchanging information between said first SGSN and said second SGSN* (§ 27). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a

Art Unit: 3694

volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of transferring information between the first and second SGSN. This is to not interrupt the communication when going from the first to the second SGSN to accomplish this would require information relating to the current communication being transferred.

23. Referring to claim 20, Schweitzer teaches exchanges between SGSN and SCP regarding prepaid subscribers, providing volume limit threshold data, forwarding the threshold data to the GGSN, accumulating billable data, and providing the accumulated data count to the SCP. Schweitzer does show exchanging data between a BSC, the SGSN and the GGSN (§ 07) but does not include the details of a second BSC or a second SGSN. Bjelland, however, discloses *exchanging data between a second BSC, said second SGSN and said GGSN*. (§ 10, 11). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Similarly, Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Bjelland discusses a more technical side while Schweitzer discusses a volume/monetary side of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer to include the specifics of exchanging data between a second BSC, a second SGSN and a GGSN. Schweitzer only lacks the reference to a second BSC and a second SGSN but does reference a BSC and a SGSN. Wireless communication works off of towers to

Art Unit: 3694

transmit the signal. The signal of an individual tower is not infinite, so it requires the use of multiple towers to be sure there aren't interruptions in use hence a second SGSN. All cellular communication requires the use of more than one SGSN.

24. Claims 3, 5-7, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schweitzer (US 20010051931 A1), in view of Bjelland et al. (US 20020089949 A1), in further view of Ephraim et al (US 20040077332 A1).

25. Referring to claim 3, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland does not explicitly teach a new volume limit threshold to the GGSN.

Ephraim, however, discloses *transmitting a new volume limit threshold to said first SGSN and forwarding said new volume limit threshold to said GGSN* (§ 55). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of a new volume limit threshold because mobile communication systems are expensive and are not one-use devices.

Art Unit: 3694

There is a need to reset the volume or add to the volume. It is important for the new volume limit to be forwarded from the SGSN to the GGSN because the GGSN is the anchor point and it maintains routing necessary to tunnel data packets to the SGSN.

26. Referring to claim 5, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland does not explicitly teach not accumulating billable counts for specific data types based on subscriber. Ephraim, however, discloses *wherein said GGSN does not accumulate billable count for selected types of data in accordance with said subscriber profile* (§§ 11-15, 39). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of not accumulating billable counts for specific data types based on subscriber because within wireless communication there are packages individuals purchase. Each package that is purchased by a subscriber offers perks based on the price they pay, such as a certain number of minutes, 3 way calling, information look up. If the data that is being used is



Art Unit: 3694

data that should not be billed based on the subscriber there is no reason to accumulate a billable count.

27. Referring to claim 6, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland does not explicitly teach different types of data counts for different billable rates. Ephraim, however, discloses *accumulating billable data count comprises the step of accumulating different types of data counts for different billable data rates* (§ 43, 44). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of different types of data counts for different billable rates. Within wireless communication there are packages individuals purchase. Each package that is purchased by a subscriber offers different services, such as a certain number of minutes, 3 way calling, and information look up. Each service offered uses a certain amount of data and has a different price. Accumulating based on different data counts based on different rates is required to bill adequately for

Art Unit: 3694

services used. Otherwise every service offered would have to be offered at the same rate even if it requires more data.

28. Referring to claim 7, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland does not explicitly teach a combination of different rates. Ephraim, however, discloses *a first type of data is provided at no cost to the subscriber and does not accumulate a data count at said GGSN, a second type of data is accumulated at a first rate at said GGSN, a third type of data accumulates at a rate lower than said first rate at said GGSN, and a fourth type of data accumulates at a rate greater than said first rate at said GGSN* (§§ 11, 12, 13, 39, 43, 44). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of different types of data counts for different billable rates. Within wireless communication there are packages individuals purchase. Each package that is purchased by a subscriber offers different services, such as a certain number of minutes, 3 way calling, and information look up. Each service offered uses a certain

Art Unit: 3694

amount of data and has a different price. Accumulating based on different data counts based on different rates is required to bill adequately for services used. Otherwise every service offered would have to be offered at the same rate even if it requires more data.

29. Referring to claim 15, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland teaches a second SGSN (§ 27) but does not explicitly teach transmitting a new volume limit threshold to said first SGSN and forwarding said new volume limit threshold to said GGSN. Ephraim, however, discloses *transmitting a new volume limit threshold from said SCP to said SGSN and forwarding said new volume limit threshold from said SGSN to said GGSN* (§ 55). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of a new volume limit threshold because mobile communication systems are expensive and are not one-use devices. There is a need to reset the volume or add to the volume. It is important for the new volume limit to be forwarded from the SGSN to

Art Unit: 3694

the GGSN because the GGSN is the anchor point and it maintains routing necessary to tunnel data packets to the SGSN.

30. Referring to claim 17, Schweitzer modified by Bjelland teaches the technical side and an overview of the usage/cost side of wireless communication. Schweitzer modified by Bjelland does teach a second SGSN but does not explicitly teach not accumulating billable counts for specific data types based on subscriber. Ephraim, however, discloses *wherein said GGSN does not accumulate billable count for selected types of data in accordance with said subscriber profile* (§ 11-15, 39). Schweitzer discloses a digital wallet for IP usage utilizing wireless voice communication and IP network. Bjelland discloses a communication system having multiple user planes utilizing mobile networks. Similarly, Ephraim discloses providing prepaid data transfer services to a subscriber with a wireless device. Bjelland discusses a more technical side, Schweitzer discusses a volume/monetary side, and Ephraim discusses how a prepaid system monitors a data network of wireless communication. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Schweitzer and Bjelland to include the specifics of not accumulating billable counts for specific data types based on subscriber because within wireless communication there are packages individuals purchase. Each package that is purchased by a subscriber offers perks based on the price they pay, such as a certain number of minutes, 3 way calling, information look up. If the data that is being used is data that should not be billed based on the subscriber there is no reason to accumulate a billable count.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie H. Swartz whose telephone number is (571) 272-7363. The examiner can normally be reached on 8:00am-4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamie Swartz  
February 16, 2007

  
ELLA COLBERT  
PRIMARY EXAMINER